

In the Claims:RECEIVED
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1. (Previously Presented) An electrode array body comprising:
a flexible body having a curved shape in multiple dimensions, and
the flexible body being adapted to conform to the spherical curvature of the retina of the
recipient's eye thus minimizing stress concentration.
2. (Previously Presented) The electrode array body according to claim 1, further comprising at
least one reinforced mounting aperture in said flexible body suitable for attaching said flexible
body to the retina with a tack.
3. (Previously Presented) The electrode array body according to claim 1, wherein said flexible
body has at least one radius of spherical curvature, which approximates the curvature of the eye,
said radius continuously decreasing near edges of said flexible body thus causing said edges of
said flexible body to lift off of the retina, eliminating stress concentrations in the retina from
contact with said flexible body.
4. (Previously Presented) The electrode array body according to claim 3, wherein said flexible
body is made of silicone having a hardness of about 50 or less on the Shore A scale as measured
with a durometer.
5. – 10. (Cancelled)
11. (Withdrawn) The electrode array body according to claim 21 wherein said attachment point
is a reinforced mounting aperture in said flexible body suitable for attaching said flexible body to
the retina with a tack.
12. (Withdrawn) The electrode array body according to claim 11 wherein,
said electrode array body has at least one radius of spherical curvature, which approximates
the curvature of the eye, said radius continuously decreasing near edges of said electrode array
body thus causing said edges of said electrode array body to lift off of the retina, eliminating

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stress concentrations in the retina from contact with said flexible body.

13. (Withdrawn) The electrode array body according to claim 21 wherein, said strain relief internal tab is thinner than the rest of said electrode array body thereby reducing stress.
14. (Withdrawn) The electrode array body according to claim 21 wherein, said electrode array body comprises silicone and said strain relief internal tab comprises a softer silicone than the rest of said electrode array body.
15. (Withdrawn) The electrode array body according to claim 11 wherein, said flexible body comprises silicone having a hardness of about 50 or less on the Shore A scale as measured with a durometer.
16. - 17. (Cancelled)
18. (Withdrawn) The electrode array body according to claim 56 wherein said reinforced mounting aperture is reinforced by means of a reinforcing ring surrounding said reinforced mounting aperture in said flexible body for structural support of a surgical tack.
19. (Withdrawn) The electrode array body according to claim 56 wherein, said reinforced mounting aperture is colored to make visually locating said reinforced mounting aperture by the surgeon during surgery easier.
20. (Withdrawn) The electrode array body according to claim 21 wherein said attachment point is a ferromagnetic keeper.
21. (Withdrawn) An electrode array body comprising:
at least one attachment point in said electrode array body for attaching said electrode array body to the retina; and

a strain relief slot in said electrode array body forming an opening around said attachment point which defines a strain relief internal tab in said flexible body for relief of stresses.

22. (Withdrawn) The electrode array body according to claim 20 wherein,
said flexible body comprises silicone having a hardness of about 50 or less on the Shore A scale as measured with a durometer.

23. – 24. (Cancelled)

25. (Withdrawn) The electrode array body according to claim 20 wherein,
said flexible body has at least one radius of spherical curvature, which approximates the curvature of the eye, said radius continuously decreasing near edges of said flexible body thus causing said edges of said flexible body to lift off of the retina, eliminating stress concentrations in the retina from contact with the electrode array flexible body.

26. (Withdrawn) The electrode array body according to claim 20 further comprising,
a grasping handle attached to said flexible body for holding with a surgical instrument during implantation.

27. – 28. (Cancelled)

29. (Previously Presented) The electrode array body according to claim 1, wherein said flexible body comprises silicone having a hardness of about 50 or less on the Shore A scale as measured with a durometer.

30. (Previously Presented) The electrode array body according to claim 1, wherein said flexible body comprises silicone having a hardness of about 25 or less on the Shore A scale as measured with a durometer.

31. – 34. (Cancelled)

35. (Previously Presented) The electrode array body according to claim 1, further comprising:
said flexible body having an array of conductive electrodes suitable for transmitting
electrical signals to the retina, and
at least one electrode mounted on said flexible body which provides an electrical reference or
ground potential.

36. (Previously Presented) The electrode array body according to claim 1, further comprising a
grasping handle attached to said flexible body for holding with a surgical instrument during
implantation.

37. (Cancelled)

38. (Previously Presented) The electrode array body according to claim 36, wherein said
flexible body comprises silicone having a hardness of about 50 or less on the Shore A scale as
measured with a durometer.

39. (Previously Presented) The electrode array body according to claim 36, wherein said
grasping handle is a hemi-tube to allow the insertion of a surgical tool during implantation
surgery.

40. (Previously Presented) The electrode array body according to claim 36, wherein said
grasping handle is a hemi-tube with an internal hole diameter approximately equal to the tube
wall thickness.

41.- 47. (Cancelled)

48. (Withdrawn) A retinal electrode array comprising:
a silicone flexible body having a hardness of about 50 or less on the Shore A scale as
measured with a durometer,
said flexible body having a curved shape suitable for conforming to the spherical
curvature of the retina of the recipient's eye minimizing stress,

said flexible body having at least one reinforced mounting aperture suitable for attaching said flexible body to the retina,

said flexible body having a reinforcing ring surrounding said reinforced mounting aperture in said flexible body for locating said reinforced mounting aperture during surgery and for structural support of a surgical tack,

said flexible body having a strain relief slot forming a semicircular opening around said reinforcing ring for relief of stresses,

said flexible body having at least one rounded edge to eliminate stress concentrations,

said flexible body having a continuously decreasing radius near edges of said flexible body causing said edges of said flexible body to lift off of the retina and thus eliminating stress concentrations,

said flexible body having a grasping handle attached to said flexible body for holding during implantation,

said flexible body having an array of conductive electrodes suitable for transmitting electrical signals to the retina,

said flexible body having at least one conductive reference electrode serving as a reference or ground potential source,

an electronics package to transmit said electrical signals to said conductive electrodes, and a feeder cable electrically coupled to said electronics package and said conductive electrodes to carry said electrical signals between said conductive electrodes and said electronics package.

49. (Cancelled)

50. (Previously Presented) The electrode array body according to claim 1, wherein said flexible body has a tapered edge to eliminate stress concentrations.

51. (Withdrawn) The electrode array body according to claim 21 having, a tapered edge on said flexible body to eliminate stress concentrations.

52. (Withdrawn) An electrode array body comprising:

a flexible body having a center and an edge, and
at least a part of said edge is more flexible than said center.

53. (Withdrawn) The electrode array body according to claim 52, wherein said at least part of said edge is made of softer material than said center.

54. (Withdrawn) The electrode array body according to claim 52, wherein said edge is tapered.

55. (Withdrawn) The electrode array body according to claim 52, wherein said edge portion includes a continuously decreasing radius of spherical curvature.

56. (Withdrawn) An electrode array body comprising:

a flexible body, and
at least one reinforced mounting aperture in said flexible body suitable for attaching said flexible body to the retina with a tack.

57. (Withdrawn) An electrode array body, comprising a flexible body having at least one radius of curvature, which approximates the curvature of the eye, said radius continuously decreasing near edges of said flexible body thus causing said edges of said flexible body to lift off of the retina, eliminating stress concentrations in the retina from contact with said flexible body.

58. (Withdrawn) The electrode array body according to claim 57, further comprising at least one reinforced mounting aperture in said flexible body suitable for attaching said flexible body to the retina with a tack.

59. (Withdrawn) The electrode array body according to claim 58, further comprising a strain relief slot in said electrode array body forming an opening around said reinforced mounting aperture which defines a strain relief internal tab in said flexible body for relief of stresses.

60. (Withdrawn) The electrode array body according to claim 57, wherein said flexible body has a center and an edge, and at least a part of said edge is more flexible than said center.

61. (Withdrawn) The electrode array body according to claim 57, wherein said flexible body comprises silicone having a hardness of about 50 or less on the Shore A scale as measured with a durometer.

62. (Withdrawn) A retinal prosthesis comprising:
an array body suitable to be affixed to a retina;
an electronics package suitable to be affixed remote from the array body;
a feeder cable for transmitting signals between said electronics package and said array body;
and one or more fixation tabs attached to said feeder cable for fixing said feeder cable.

63. (Withdrawn) The retinal prosthesis according to claim 62, wherein said electronics package is affixed external to the sclera and said feeder cable pierces the sclera.

64. (Withdrawn) The retinal prosthesis according to claim 62, further comprising fixation tabs attached to said electronics package.

65. (Withdrawn) The retinal prosthesis according to claim 62, wherein said at least a portion of said feeder cable is coiled between said fixation tab and said array body.